Amendment to the Claims

Please cancel Claim 55.

Please amend Claim 2, as follows:

1. (Canceled)

2. (Currently Amended) A physiological training and evaluation simulator suitable for training and testing personnel, comprising:

      (a) a simulated physiological structure; and

      (b) an evaluation circuit including a conductive elastomer, the conductive elastomer enhancing the realism of the simulated physiological structure, the conductive elastomer being configured as a portion of the simulated physiological structure, said evaluation circuit being configured to conduct an electrical signal from a chemical sensor disposed in the physiological training and evaluation simulator when the sensor detects a chemical ~~change~~ in the physiological training and evaluation simulator;

      (c) a processor coupled to the evaluation circuit and configured to ~~manipulate the signal~~ determine if a quantity of the chemical detected is sufficient to trigger a simulated physiological response; and

      (d) a physiological control element configured to produce a simulated physiological response in the simulated physiological structure, the physiological control element being coupled to the evaluation circuit so that the processor uses the evaluation circuit to control the physiological control element based on input from the chemical sensor.

3. (Canceled)

4. (Previously Presented) The physiological training and evaluation simulator of Claim 2, wherein the conductive elastomer comprises a conductive carbon dispersed in an elastomeric matrix.

5. (Previously Presented) The physiological training and evaluation simulator of Claim 2, wherein the conductive elastomer comprises a metallic powder dispersed in an elastomeric matrix.

6. – 20. (Canceled)

21. (Previously Presented) The physiological training and evaluation simulator of Claim 88, further comprising an indicator coupled to the evaluation circuit, such that in response to the signal the indicator provides an indication relating to the performance of the simulated procedure.

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22. (Original) The physiological training and evaluation simulator of Claim 21, wherein the indicator comprises a light source, light emitted by the light source providing feedback regarding the performance of the procedure.

23. (Original) The physiological training and evaluation simulator of Claim 21, wherein the indicator comprises a meter, a change in the meter providing feedback regarding the performance of the procedure.

24. (Previously Presented) The physiological training and evaluation simulator of Claim 88, wherein the simulated physiological structure is a simulated human tissue structure.

25. (Original) The physiological training and evaluation simulator of Claim 24, wherein the simulated human tissue structure comprises:

(a)   at least one simulated membranous layer comprising at least one elastomeric layer; and

(b)   at least one simulated sub-membranous layer comprising at least one elastomeric layer underlying a first membranous layer.

26. (Original) The physiological training and evaluation simulator of Claim 2, wherein the evaluation circuit is implemented in three dimensions.

27. (Original) The physiological training and evaluation simulator of Claim 26, wherein the evaluation circuit is implemented as a three-dimensional grid.

28. (Original) The physiological training and evaluation simulator of Claim 27, wherein the three-dimensional grid encompasses a majority of the simulated physiological structure.

29. – 32. (Canceled)

33. (Previously Presented) The physiological training and evaluation simulator of Claim 2, wherein the physiological control element comprises at least one of a servo and a pump.

34. – 42. (Canceled)

43. (Previously Presented) The physiological training and evaluation simulator of Claim 88, wherein the physiological training and evaluation simulator comprises a surgical trainer, and the simulated physiological structure comprises at least one of a simulated human tissue structure and a simulated organ included in the surgical trainer.

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44. (Original) The physiological training and evaluation simulator of Claim 43, wherein the surgical trainer comprises:

(a) at least one simulated structure corresponding to an internal anatomical structure of a human body;

(b) an exterior cover encompassing a substantial portion of the surgical trainer, the exterior cover having at least one predefined opening defining an operative site, so that each opening is disposed adjacent to a different structure, to facilitate access to said structure; and

(c) the simulated human tissue structure is incisable, and is disposed proximate to each predefined opening, such that access to said at least one structure via the adjacent predefined opening requires making an incision in said simulated human tissue structure, an exterior surface of each simulated human tissue structure being substantially flush with respect to an outer surface of the exterior cover, each simulated human tissue structure being removable to be replaced after use, said simulated human tissue structure comprising a plurality of layers, said plurality of layers generally corresponding to layers of tissue found in a human being at a location corresponding to the operative site, and at least one of the plurality of layers including the conductive elastomer.

45. - 87. (Canceled)

88. (Previously Presented) A medical training simulator suitable for medical skills training and evaluation, the medical training model comprising a simulated physiological structure and an evaluation circuit including a conductive elastomer, the evaluation circuit including a first conductive segment and a second conductive segment separated by a non conductive segment such that they are not electrically coupled to each other, the first conductive segment and the second conductive segment being part of the simulated physiological structure, said evaluation circuit being configured to provide data related to proper execution of a simulated medical procedure being performed using the simulated physiological structure when the non conductive segment is removed and the first conductive segment and the second conductive segment are coupled together during the simulated medical procedure, thereby completing the evaluation circuit and enabling the evaluation circuit to provide the data related to the proper execution of the simulated medical procedure.

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89. (Previously Presented) A medical training simulator suitable for medical skills training and evaluation, the medical training model comprising a simulated physiological structure and an evaluation circuit including a conductive elastomer, the evaluation circuit including a first conductive segment and a second conductive segment separated by a gap, such that they are not electrically coupled to each other, the first conductive segment and the second conductive segment being part of the simulated physiological structure, said evaluation circuit being configured to provide data related to proper execution of a simulated medical procedure being performed using the simulated physiological structure when either the first conductive segment or the second conductive segment are repositioned and placed in contact with either the other of the first conductive segment or the other of the second conductive segment during the simulated medical procedure, thereby completing the evaluation circuit and enabling the evaluation circuit to provide the data related to the proper execution of the simulated medical procedure.

90. – 100. (Canceled)

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